



Weston Solutions, Inc.
20 North Wacker Drive, Suite 1210
Chicago, IL 60606-2901
312-424-3300 • Fax 312-424-3330
www.westonsolutions.com

January 19, 2012

Mr. Steven Faryan
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency, Region V
77 West Jackson Blvd, SE-5J
Chicago, IL 60604-3507

Subject: Final Letter Report
Markham Dump Site – Removal Action
Markham, Cook County, Illinois
Contract No.: EP-S5-06-04
Technical Direction Document No.: S05-0001-1103-032
Document Control No.: 1421-2A-APPF

Dear Mr. Faryan:

The Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START) prepared this letter report in accordance with the requirements of Technical Direction Document (TDD) No. S05-0001-1103-032, which the United States Environmental Protection Agency (U.S. EPA) assigned to WESTON START. The scope of this TDD was to support and oversee a time-critical removal action at the Markham Dump Site at W. 160th Street and Oakley Avenue in Markham, Cook County, Illinois (the Site). On March 11, 2011, the U.S. EPA Acting Superfund Division Director signed an action memorandum approving funding for the time-critical removal action. WESTON START mobilized to the Site on April 11, 2011, and demobilized from the Site on June 30, 2011.

The geographical coordinates for the Site are 41°35'48.59" North latitude and 87°40'22.16" West longitude (**Figure 1 in Attachment A**). The Site is located in a mixed industrial, commercial, and residential area and covers about 30 acres. The Site is approximately bounded by the Calumet Union Ditch (a drainage ditch) to the south, Hamilton Avenue to the east, W. 160th Street to the north, and Western Avenue to the west. A church and residential property (located across 161st Street from the church) are located within the approximate Site boundary (**Figure 2 in Attachment A**).

The time-critical removal action involved (1) the disposal of hazardous materials in drums and other miscellaneous containers scattered throughout the Site and (2) the excavation and stabilization of lead- and chromium-contaminated soil.

To complete this TDD, WESTON START performed the following activities:

- Reviewed a site-specific safety plan prepared by the Emergency and Rapid Response Services (ERRS) contractor
- Conducted x-ray fluorescence (XRF) screening of on-site soils



Mr. Steven Faryan
U.S. EPA, Region V

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Markham Dump Site
January 19, 2012

- Conducted confirmation soil sampling
- Oversaw the excavation and stabilization of on-site soils by the ERRS contractor
- Oversaw the ERRS contractor performing hazard categorization and bulking of on-site wastes
- Provided written and photographic documentation
- Maintained Site removal action files

During soil excavation, the high level of the water table prevented the removal of all lead-contaminated soil to levels below the screening level of 800 parts per million. The screening level is based on the U.S. EPA Regional Screening Level (RSL) for Industrial Soil which is also the same value as the Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) Tier 1 remediation objective for industrial soil. Orange snow fencing was used to delineate the contaminated soil left in place, and clean fill was graded over the excavation area to prevent direct-contact threats. The City of Markham will place a deed restriction on the Site's title, and future development of the Site property will have to consider this restriction during planning and design. The figure in **Attachment B** shows lead concentrations in the soil before the orange snow fencing and clean fill were laid over the excavation area. The U.S. EPA Field Environmental Decision Support (FIELDS) team created this figure and also performed the final XRF soil screening.

Attachment C presents the pollution reports (POLREP) for the Site, which summarize the time-critical removal action activities. The final POLREP (POLREP 8) provides a waste disposal summary table that summarizes the quantities and types of wastes generated by the removal action and their disposal locations.

This letter report serves as the final deliverable for this TDD. WESTON START anticipates no further activities under this TDD. If you have any questions or comments regarding this report or require additional copies, please contact me at (312) 424-3300.

Sincerely,
WESTON SOLUTIONS, INC.

Lisa Graczyk
WESTON START Project Manager

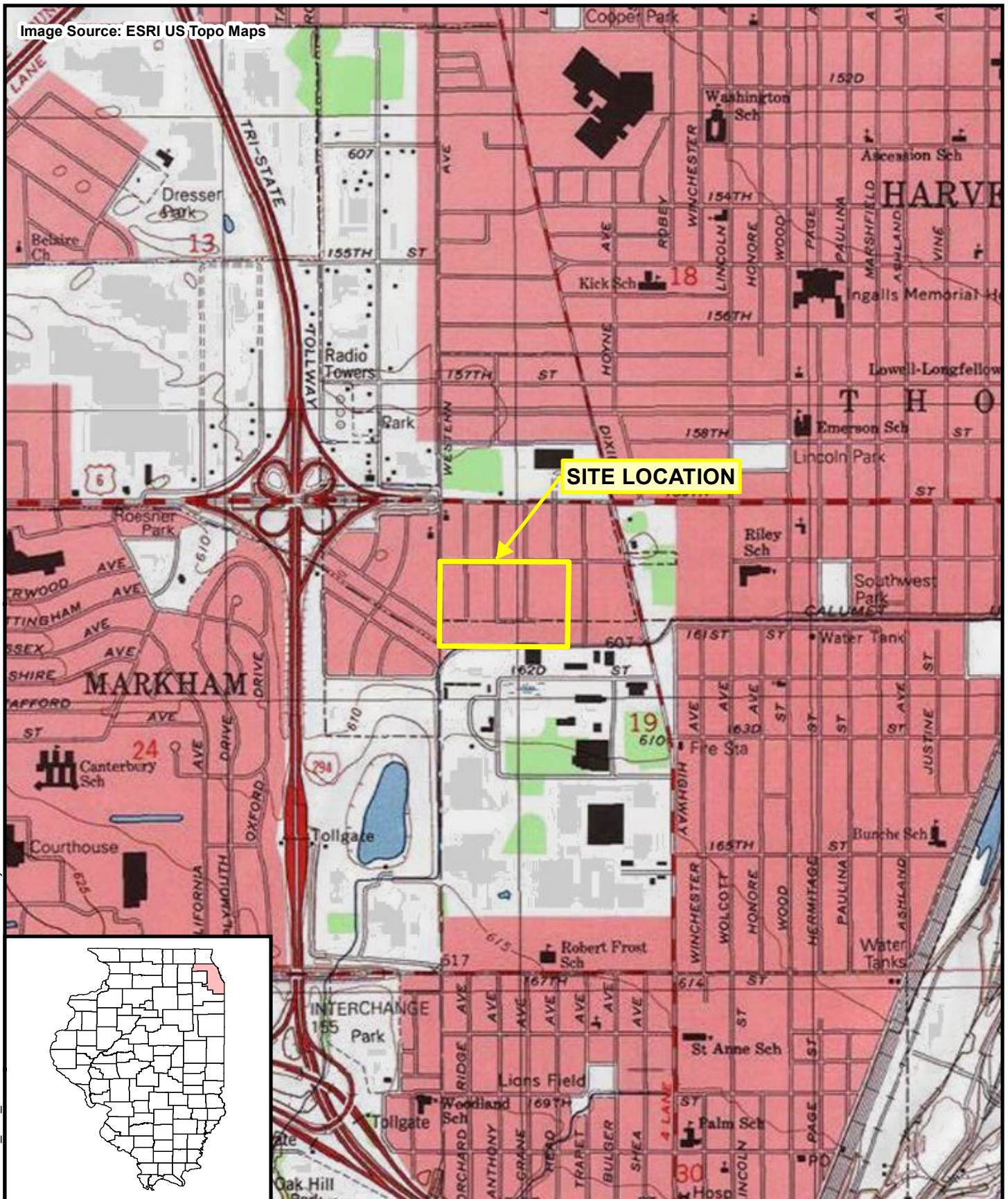
Attachments:

- A – WESTON Figures
- B – U.S. EPA FIELDS Figure
- C - POLREPs

cc: WESTON START DCN File

**ATTACHMENT A
WESTON FIGURES**

Image Source: ESRI US Topo Maps



Legend

Site Boundary

0 2,000
Feet



Prepared for:
U.S. EPA REGION V

Contract No.: EP-S5-06-04
TDD: S05-0001-1103-032
DCN: 1421-2A- APPF



Prepared By:
**WESTON
SOLUTIONS, INC**



20 North Wacker Drive
Suite 1210
Chicago, Illinois 60606

Figure 1
Site Location Map
Markham Dump Site
Markham, Cook County, Illinois

FILE: D:\Markham\MXD\RVF2_Site_Features.mxd 1/19/2012 2:50:24 PM wojdakon



Legend

-  Area Excavated
-  Site Boundary

0 200
Feet



Prepared For:
US EPA Region V
Contract No.: EP-S5-06-04
TDD: S05-0001-1103-032
DCN: 1421-2A- APPF



Prepared By:
WESTON SOLUTIONS, INC.
20 North Wacker Drive, Suite 1210
Chicago, Illinois 60606

Figure 2
Site Features Map
Markham Dump Site
Markham, Cook County, Illinois

ATTACHMENT B
U.S. EPA FIELDS FIGURE



Markham Dump

XRF Survey 06/24/11

Average Lead concentration (ppm) found around center of cell:

A1 18,000	B1 1,700	C1 5,000	D1 5,500	E1 3,500	F1 1,448
A2 32,000	B2 7,500	C2 11,000	D2 5,100	E2 2,800	F2 1,873
A3 5,600	B3 2,900	C3 8,600	D3 2,900	E3 2,000	F3 922
A4 358	B4 262	C4 1,300	D4 388	E4 1,500	F4 1,709
A5 730	B5 570	C5 600	D5 540	E5 1,600	F5 1,104

Legend

-  Grid with Composite Lab Result
-  Grid with Average XRF Result

Note:

Analytical results were calculated for 22/30 composite samples.

The Lead values for the following eight grid cells were calculated from the average of the XRF data:
A4, B4, D4, F1, F2, F3, F4, and F5.

0 25 50 100 150 200
Feet



ATTACHMENT C
POLREPs

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region V**

Subject: POLREP #1
 Initial POLREP Markham Dump
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To: Jason El-Zein, ERB
 Linda Nachowicz, USEPA
 Karl Richard, USEPA

From: Steven Faryan, On-Scene Coordinator

Date: 4/21/2011

Reporting Period: 4/11/11 to 4/21/11

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

The US EPA initiated a Time Critical Removal Action on April 1, 2011 at the Markham Dump. The removal action is a fund lead action utilizing the Region 5 emergency removal funding. IEPA requested USEPA's assistance to remove drums, containers, totes and supersacs of chemicals that were illegally disposed of at this open dump. In addition, IEPA requested that US EPA remove the lead contaminated soil that was found on site from battery breaking operations.

1.1.2 Site Description

The Markham Dump is located at 160 th and Irving Road in Markham Illinois in Cook County.

USEPA and emergency response contractors began the time critical removal action at the Markham Dump in Markham, Illinois this Monday April 11, 2011. The scope of work includes staging, sampling and disposal of drums, totes, bags and containers. Approximately 75 drums, totes and smaller containers have been staged and will be sampled in Level B personnel protection. The samples will be Hazcatted to determine Hazard Category and a composite sample will be sent to the lab to set up disposal.

In addition, lead and chromium contaminated soil will be excavated, treated and disposed of off-site at an approved landfill. A treatability study was completed to test several fixation agents. Bids will be collected from the different vendors and a cost analysis will be completed to evaluate the selected fixation agent. A composite sample was collected from the excavation pile and will be sent to the lab to evaluate treatment alternatives

U.S. EPA's FIELDS group has been on site collecting surface concentrations with the XRF unit and GPS locations. Maps have been generated to outline the excavation areas and to estimate the volume of soil that will be excavated. In addition, the areas where elevated metals have been detected with the XRF have been mapped and the average concentrations calculated.

USEPA has been working with IEPA to address this illegal dump that operated for over 15 years. IEPA has spent over \$1.1 million dollars to remove solid waste and tires from the property. IEPA also removed abandoned tires from the site.

Security at the site is being provided by the City of Markham under and order with the Illinois Attorney General's Office to prevent any further dumping on the property. Once the removal action is completed the City of Markham, who owns most of the parcels, plans to redevelop the property into commercial utilization.

1.1.2.1 Location

Markham, Illinois Cook County

1.1.2.2 Description of Threat

The conditions remaining at the Markham Dump Site present a substantial threat to the public health or welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the NCP, 40 CFR 300.415(b)(2). These criteria include, but are not limited to, the following:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

High levels of lead were found at the surface from battery breaking and burning operations. Total Lead levels were determined through sampling to range from 2,800 mg/kg to as high as 10,000 mg/kg. TCLP concentrations of lead were found to be 8.6 mg/l which is above the 5 mg/l RCRA standard making the contaminated soil a characteristic waste. The potential exists for nearby human populations and animals to come in contact with these chemicals through direct contact or contact with the storm water.

The northeast portion of the Site contains white solid chunks of material believed to be pool and industrial chemicals. Field testing using pH paper of the storm water near these chemicals

indicated a pH of 11 SUs, which indicates that the pool chemicals are leaching to soil. In addition, numerous other suspected pool chemicals were observed in 55-gallon poly drums open to the atmosphere. Bags labeled “Ammonium Sulfate” also were present on site, and a sample collected from one of the bags contained 2,800 mg/kg of ammonia (as nitrogen). Ammonium sulfate has a median lethal dose (LD50) of 2,840 mg/kg for rats. In addition, if the ammonium sulfate were to reach the Calumet Union Ditch, it could be potentially fatal to aquatic life. If the sodium tri poly phosphate were to reach the Calumet Union Ditch, this could result in excessive nutrient (phosphate) loading which would be harmful to aquatic life.

The Site is located in a mixed commercial, industrial, and residential area. A church is located on site, and dogs live on the property. The public continues to access the site to use the church and the site is not fenced. The potential exists for nearby human populations and animals to come in contact with these chemicals through direct contact or contact with the storm water.

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.

The Site contains poly drums full of suspected pool and industrial chemicals. The chemicals are found in drums and bags labeled “Ammonium Sulfate,” totes containing oil, and numerous other small containers. Sample MD-C04-051010 from one of the drums had a pH of 12 SUs which is just under the RCRA corrosivity characteristic limit of 12.5 SUs. Sample MD-C01-051010 from the suspected pool chemicals contained 4.5 percent chlorine and had a pH of 9.4 SUs. Also, the northeast portion of the Site contains un-containerized white solid chunks lying on the ground. Field testing using pH paper and analysis of a sample from the storm water runoff near the chemicals indicate that the chemicals are leaching to soil and to the environment. In addition, some drums were open to the atmosphere or tipped over. The contents of the drums are spilling to the ground and releasing their contents to the soil and to the storm water and storm water runoff. The storm water drains to the Calumet Union Canal adjacent to the site which leads to the Little Calumet River which ultimately drains to Lake Michigan.

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.

Elevated lead levels were detected during the initial site assessment and samples collected and verified during a supplemental assessment with samples and analytical results showing levels of lead ranging from 2,800 mg/kg to 10,000 mg/kg. TCLP levels for lead were documented at 8.6 mg/l which is above the standard of 5 mg/l making the waste characteristic hazardous waste according to Resource Conservation and Recovery Act. The lead contamination has been documented at or near the surface and can migrate through dust dispersion and through storm water runoff into the adjacent Calumet Union Ditch which leads to the Little Calumet River which drains to Lake Michigan.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

High lead levels documented in surface soils were found to be characteristic waste according to TCLP testing and can migrate via wind and dust dispersion and through storm water runoff.

The drums, totes and super sacs that are found along Leavitt Street are open to the elements. Samples and analytical results have shown high pH levels, high ammonia levels and chlorine levels in samples collected of the wastes. The drainage of the site leads to the Calumet Union Ditch which leads to the Little Calumet River.

The Bags labeled “Ammonium Sulfate” were sampled and contained 2,800 mg/kg of ammonia (as nitrogen). Ammonium sulfate has a median lethal dose (LD50) of 2,840 mg/kg for rats. In addition, if the ammonium sulfate were to reach the Calumet Union Ditch, it could be potentially fatal to aquatic life. If the sodium tripoly phosphate were to reach the Calumet Union Ditch, this could result in excessive nutrient (phosphate) loading which would be harmful to aquatic life.

Threat of fire or explosion.

Garbage fires and tire fires have historically been set at the site. The totes, drums, cylinders and bags and super sacks of chemical have been highly impacted from the previous fires causing a greater potential to release their contents. The liquids in the totes are combustible liquids which compounds the threat of fire.

The availability of other appropriate federal or state response mechanisms to respond to the release.

As indicated in their June 17, 2010 referral letter, Illinois EPA has been working to remove the non-hazardous items from the dump. However, due to funding and statutory limitations, Illinois EPA has requested U.S. EPA assistance for the disposal of the hazardous substances that may be present at the site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On April 7, 2010, Illinois EPA responded to a tire fire at an open dump on the south side of Markham, Illinois. On April 28th, U.S. EPA conducted a site walk through with representatives from the Illinois Attorney General Office and Illinois EPA.

On May 10, 2010 U.S. EPA personnel and Superfund Technical Assistance and Response Team (START) contract personnel conducted a removal site assessment.

Four samples were collected from totes and drums and super sacs found on site, four soil samples were collected from the burned tire area and 2 bulk samples were collected for asbestos analytical.

- The following potentially hazardous materials and containers were observed at the Markham Dump:
 - White solid material lying on the ground and in 55-gallon poly drums suspected to contain pool chemicals (analytical results indicated a pH of 9.4 SUs and 4.5 percent chlorine for a sample from one of these drums);
 - 2000-pound super sacks labeled “Sodium Tripoly Phosphate”;
 - 300 gallon totes partially filled with a combustible liquid;
 - Several 50-pound bags labeled “Ammonium Sulfate”;
 - One partially (one-quarter) full drum of “Pyrazol Yellow BG Powder” (analytical results revealed that a sample from this drum had a pH of 12 SUs);
 - Several gas cylinders (suspected to be empty). Thousands of empty containers including poly, steel, and fiberboard 55-gallon drums; 5-gallon buckets;
 - Broken battery casings were observed in several areas and XRF and analytical samples confirmed highly elevated lead levels in the surface soils;

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

IEPA has spent over \$1.1 Million to remove solid waste and tires from the property.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Continue sampling activities, setting up disposal, and excavation of contaminated soils.

2.2.1.1 Planned Response Activities

The scope of work includes staging, sampling and disposal of drums, totes, bags and containers. The scope of work includes staging, sampling and disposal of drums, totes, bags and containers.

2.2.1.2 Next Steps

Continue Excavation of contaminated soils.
 Utilize XRF to determine depth of excavation.
 Sample Drums and run HAZCAT analysis.
 Analyze waste streams and set up disposal.
 Transport and Dispose of Waste off-site at a facility in CERCLA off-site compliance
 Demobilize

2.2.2 Issues

None

2.3 Logistics Section

NA

2.4 Finance Section

2.4.1 Narrative

See Daily 1900-55's

Contractor Costs as of 4/21/11 \$34,500

2.5 Safety Officer

A site HASP is signed and on-site. Daily tailgate safety meetings are held in the morning.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

IEPA has issued two fact sheets to residents and local citizens and community leaders. Ginny Narsette of USEPA is the public affairs contact.

2.7.2 Community Involvement Coordinator

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating and Assisting Agencies

IEPA

Village of Markham

4. Personnel On Site

ER is the on-site contractor and there are two clean up techs, two operators, one accountant, one Response Manager, one OSC, and one START.

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

6.2 Reporting Schedule

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V**

Subject: **POLREP #2**
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To: Jason El-Zein, ERB
 Linda Nachowicz, USEPA
 Douglas Ballotti, USEPA

From: Steven Faryan, On-Scene Coordinator

Date: 4/28/2011

Reporting Period: 4/21/2011 to 4/28/2011

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Inactive Open Dump

1.1.2 Site Description

See POLREP #1

1.1.2.1 Location

See POLREP #1

1.1.2.2 Description of Threat

See POLREP # 1

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP#1

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

US EPA , START and EERS contractor ER have been on site since April 11, 2011 conducting the time critical removal action. The scope of work includes collection, staging and sampling and disposal of containers, drums and super sacs of chemicals that were abandoned at the site. The scope includes excavation, treatment and disposal of lead contaminated soil that was resultant of battery breaking operations and illegal disposal.

2.1.2 Response Actions to Date

USEPA and their contractors have staged and sampled 115 containers. The containers vary from 55 gallon drums, super sacs of solid chemicals and 5 -35 gallon drums and buckets. The containers were sampled in Level B personnel protection. Samples will be run for HAZCAT and compatible samples will be prepared and sent out to the MicroBac laboratory for disposal analysis.

The lead soil excavation area encompasses a 200 foot by 200 foot area that has been broken into 40 foot grids. Battery casings from breaking operations were observed in this area and lead levels have been detected as high as 10,000 ppm by using the hand held XRF unit. In addition, some of the soil contains suspected paint waste as color of the soil was observed to be green, yellow, red. Samples were collected and sent to the lab for analysis.

The excavation of lead contaminated soil has been completed and the soil has been and stockpiled and sampled to set up disposal. Perched ground water was encountered in the excavation area at 12-16 inches below ground surface. The excavation was stopped at this point and battery casings are still visible in some areas. A plan is being developed to provide a barrier over these areas where the casings and residual contamination will remain.

Samples were collected from the piles and a treatability study will be conducted using different percentages of treatment chemicals. Lime Kiln Dust, Enviro Blend and Free Flow will be evaluated as treatment chemicals if the material needs to be chemically fixated.

While excavating the lead contaminated soil, ground water was encountered and the excavation had to be halted. USEPA will propose to use a barrier over the bottom of the excavation area and backfill with fill. The City of Markham has offered free backfill from a water and sewer project on 159th Street which is two blocks away. A cost estimate will be put together to place the geo fabric over the excavation area and truck the clean dirt from the clean fill pile which is 2 blocks from the site.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

See Enforcement Confidential Addendum in Action Memorandum.

2.1.4 Progress Metrics:

115 Drums, containers and supersacs staged, sampled and Hazcat analysis completed
estimated 6,000 cubic yards of lead soil excavated and staged
125 empty drums and containers cut and awaiting disposal

2.2 Planning Section

2.2.1 Anticipated Activities

Hazcat analysis has been completed on the 115 samples collected from the drum and container samples. Samples of the compatible waste streams will be composited together and send to the lab for disposal analysis. Compatible Waste Streams will be re-containerized to minimize drums and assure DOT compliance for shipping.

Prepare and Submit plan to place a barrier over the lead excavation area.

Consolidate waste streams into drums and set up disposal facilities

Continue to cut empty containers

Submit a request for proposal to disposal company's for disposal of soil, liquids and solids.

Fixate and Dispose of soil at a CERCLA compliant facility

Dispose of liquids and solids at a CERCLA compliant facility.

Place barrier and clean soil over excavated area

2.2.1.1 Planned Response Activities

Complete above tasks. The site will be shut down for several days during the first and second week of May to wait for analytical results and bids for disposal.

2.2.1.2 Next Steps

Re-mobilize and complete the above tasks. Turn site back over to the City of Makhm, IEPA and Illinois Attorney General's office.

2.2.2 Issues

The heavy rains and lack of drainage on site and site conditions has caused flooding and a perched water table has made excavation of all of the lead impacted soil impossible. IEPA has been contacted and has been on site to discuss placing a barrier and clean soil over the impacted area. Institutional Controls would be placed on that area and entered into the deed.

2.3 Logistics Section

NA

2.4 Finance Section

2.4.1 Narrative

EERS Costs: \$54,302	EERS Ceiling: \$366,000	Balance \$311,698
START Costs: \$12,000	START Ceiling: \$ 25,000	Balance \$ 13,000
USEPA Costs: \$ 5575	USEPA Ceiling:\$	Balance

Project Total \$71,877

2.5 Safety Officer

Site HASP is on-site and daily safety plan meetings are being conducted. HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust has been detected

with personal data ram. Sample pumps have been ordered to monitor dust and lead in the work zone. Lead blood samples will be collected from personnel at job end.

2.6 Liaison Officer

The epaos.org web site is being maintained and information is posted and made public. A web site will be opened on the epa.gov web site.

2.7 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

EERS: 1 Response Manager, 2 Techs, 2 Operators

START: 1

USEPA: 1 OSC, Fields personnel on-site as necessary

1 Operator demobilized on Tuesday April 26, 2011

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

6.2 Reporting Schedule

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region V**

Subject: **POLREP #3**
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To:
From: Steven Faryan, On-Scene Coordinator
Date: 5/5/2011
Reporting Period: April 28, 2011 to May 5, 2011

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category
 Abandoned Open Dump

1.1.2 Site Description

See POLREP # 1

1.1.2.1 Location

See POLREP # 1

1.1.2.2 Description of Threat

See POLREP # 1

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

U.S EPA and EERS contractor ER have staged, sampled and run HazCat fingerprinting on 110 containers. The compatible waste groups, corrosive liquids, corrosive solids, acids, combustible liquids, base neutral liquids, base neutral solids are being composited in containers. The corrosive solid material has been staged on a liner and are found in 1 cubic yard super sacs. The solids will be sampled and if results indicated no hazardous constituents, they will be consolidated into the soil pile and disposed of at the landfill.

A request for proposal has been drafted and will be sent out to bid for disposal of the estimated 3,000 tons of soil, cut containers, PPE and other non-hazardous solids.

A request for proposal will be sent out for the hazardous soil if after conducting a cost analysis, off-site disposal makes more economic sense.

A request for proposal will be sent out for disposal of the drums of compatible material.

A treatability study was conducted on the original soil pile (#1) and fixation agents EnviroBlend, Free Flow and Lime Dust were used to treat the soil. Additional treatability studies may be conducted when the data is recieved from the piles which were re-sampled.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

See Enforcement Confidential Section in Action Memo

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Continue consolidation of comatible waste streams

Collect Samples for Disposal Parmaters from consolidated Waste Streams

Send out Request for Proposal for disposal of non-hazardous solids, hazardous solids and drums containing consolidate waste streams

Conduct Additional Treatability on Stock piled Hazardous Soil

Evaluate perched ground water conditions in excavation area and prepare cost estimate if water has to be treated. A filtrate sample was analyzed in the lab using a 5 micron filter. If successful, bag filters may be used on site to dewater the excavation area if water levels do not recede.

Secured site and De-Mobilize until sub-contract for disposal is awarded and waste disposal approvals have been obtained. The site will be demobilized on May 6, 2011. The site will be

secured and the City of Markham Police will provide security.

2.2.1.1 Planned Response Activities

Remobilize after sub-contract for disposal of soil, compatible waste streams has been awarded and approvals have been obtained.

Planned re-mobe on May 23,2011

2.2.1.2 Next Steps

Award sub-contracts for disposal of all hazardous materials, treated waste, solids, cut containers and miscellaneous bottles, aerosol cans and other items.

If the water table drops in elevation the excavation area will be cleaned up to remove the contaminated soil that was not excavated due to water infiltration.

Dispose of stock piled soil, cut containers, PPE, and inorganic salts at a Subtitle D Landfill that is in CERCLA off-site compliance.

Dispose of Drums containing compatible waste streams.

Backfill excavation area if high water conditions allow with clean fill. The City of Markham has allowed USEPA to use the clean fill stockpiled on 159th and Western. Samples of the fill were collected and the pile was surveyed to determine volume.

2.2.2 Issues

High Water table in the excavation area caused a shut down in removal activities. The area will be allowed to drain by natural conditions and will then be re-evaluated.

2.3 Logistics Section

NA

2.4 Finance Section

2.5 Safety Officer

Site HASP is on-site and daily safety plan meetings are being conducted. HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust has been detected above action levels with personnel data ram. Sample pumps have been ordered to monitor dust and lead in the work zone. Lead blood samples will be collected from personnel at job end.

2.6 Liaison Officer

NA

2.7 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

EERS: 1 Response Manager, 1 Clean-Up Technician, 1 Operators

START: 1

USEPA: 1 OSC, Fields personnel on-site as necessary

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

IEPA Web Site: <http://www.epa.il.us/>

6.2 Reporting Schedule

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region V**

Subject: **POLREP #4**
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To:
From: Steven Faryan, On-Scene Coordinator
Date: 6/9/2011
Reporting Period: to 6/09/11

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category
 Abandoned Open Dump

1.1.2 Site Description

See POLREP # 1-3

1.1.2.1 Location

See POLREP # 1-3

1.1.2.2 Description of Threat

See POLREP # 1-3

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1 -3

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

U.S EPA and EERS contractor ER have staged, sampled and run HazCat fingerprinting on 110 containers. The compatible waste groups, corrosive liquids, corrosive solids, acids, combustible liquids, base neutral liquids, base neutral solids have been composited in DOT approved containers. A Request for Proposal was sent out to disposal contractors and bids are due Friday June 10,2011.

The corrosive solid material has been staged on a liner and have been covered with plastic. The corrosive solids were sampled and results indicated no hazardous constituents. The corrosive solids and cut drums and containers will be transported via a dump truck and will be consolidated into the soil pile and disposed of at the landfill.

A request for proposal was awarded to Homewood Disposal for transportation and disposal of the estimated 1,500 tons of stabilized soil ,cut containers, PPE and other non-hazardous solids. The Newton County Landfill will be used for disposal. This landfill is in compliance with the CERCLA off-site disposal policy.

A treatability study was conducted on soil pile (#1, #2,#3, and #4) was conducted with fixation agents EnviroBlend, Free Flow and Inland Steel Lime Dust were used to treat the soil. The Free Flow 100 (phosphate) agent and Inland Steel bag house dust worked the best at stabilizing the metals. A cost analysis was conducted and the Free Flow 100 was chosen as the most cost effective since on only 3% blend was needed to fixate the soil and this will lower the volume of soil being transported and disposed of off site.

EERS contractor Environmental Restoration began stabilizing the soil piles on Monday June 6, 2011 utilizing the Free Flow 100. The Free Flow comes in 1 ton super sacs that has a shoot on the bottom to facilitate adding the material to the soil piles. A mix of 66 1 ton buckets to 2 one ton bags of Free Flow was used and the material was mixed thoroughly. Piile # 4 which is approximately 1,000 tons was completed on Tuesay June 7. Additional excavation was completed in the center of the 200 by 200 foot area where additional battery casings were observed. Additional excavation was completed in the area where a suspected paint waste was disposed of and the material is a greenish, yellow, and red color. This soil was stabilized with the Free Flow 100 material.

Heavy rains on Thursday June 9, 2011 have delayed the completion of the fixation of piles # 3 and # 2. Once these piles are mixed with the Free Flow 100, all of the piles will be sampled and TCLP analysis will be run on the soil. When the piles are determined to be non-hazardous, transportation and disposal will be initiated.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)was

See Enforcement Confidential Section in Action Memo

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
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2.2 Planning Section

2.2.1 Anticipated Activities

Continue consolidation of comatible waste streams

Collect Samples for Disposal Parmaters from consolidated Waste Streams

Send out Request for Proposal for disposal of non-hazardous solids, hazardous solids and drums containing consolidate waste streams

Conduct Additional Treatability on Stock piled Hazardous Soil

Evaluate perched ground water conditions in excavation area and prepare cost estimate if water has to be treated. A filtrate sample was analyzed in the lab using a 5 micron filter. If successful, bag filters may be used on site to dewater the excavation area if water levels do not recede.

Secured site and De-Mobilize until sub-contract for disposal is awarded and waste disposal approvals have been obtained. The site will be demobilized on May 6, 2011. The site will be secured and the City of Markham Police will provide security.

2.2.1.1 Planned Response Activities

Continue to stabilize the soil piles with a 3% blend of Free Flow 100. Sample piles to determine if the TCLP analysis is below regulatory levels. Award contract for disposal of the drums and containers. Consolidate non-hazardous solids and cut containers into the soil pile for disposal. The excavation area will be backfilled with clean fill from a City of Markham sewer project that was completed 2 blocks from the site. The material will be transported to the site and used as a cover on the excavation area. The removal of the lead and chromium contaminated soil will be conducted to depth allowed by the intrusion of perched ground water. At that level the excavation will have to be stopped due to ground water and surface water filling the excavation area. It is projected that the 900 ppm Industrial standard for lead will not be achieved in the excavation area. Snow fence or another type of marking material will be put down to delineate the excavation depth and clean fill will be graded over the excavation area. The City of Markham will be required to place a deed restriction detailing the area where the contaminated soil was not able to be removed. Any future development of this area will have to be planned to not disturb this soil unless it is removed and disposed of at a approved landfill. US EPA will meet with IEPA and the City of Markham to brief them on the excavation area.

2.2.1.2 Next Steps

Award sub-contracts for disposal of all hazardous materials, treated waste, solids, cut containers and miscellaneous bottles, aerosol cans and other items.

Dispose of stock piled soil, cut containers, PPE, and inorganic salts at a Subtitle D Landfill (Newton County Landfill in Indiana) which is in CERCLA off-site disposal policy.

Dispose of Drums and containers containing acid liquids, dye, cleaning agents, oil and combustible liquids and caustic liquids.

Backfill excavation with clean fill. The City of Markham has allowed USEPA to use the clean fill stockpiled on 159th and Western. Samples of the fill were collected and the pile was

surveyed to determine volume. The fill was determined to be clean and will be used for the backfilling of the excavation area.

2.2.2 Issues

High Water table in the excavation area caused a shut down in removal activities. US EPA will not be able to remove all of the contaminated soil and the excavation can only be conducted down to the level where the perched water begins filling the area. A marker such as snow fence will be used to delineate the material left in place and clean fill will be graded over the area to prevent direct contact. A deed restriction will have to be placed in the title by the City of Markham and any future development of the property will have to consider this in the planning and design.

2.3 Logistics Section

NA

2.4 Finance Section

2.5 Safety Officer

Site HASP is on-site and daily safety plan meetings are being conducted. HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust has been detected above action levels with personal data ram. Air Sample pumps have been deployed to monitor dust and lead in the work zone. Lead blood samples will be collected from personnel at job end.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

A web site has been established on the US EPA Region 5 web site to keep the public and press informed on the progress of the removal action

2.7.2 Community Involvement Coordinator

A press briefing and fact sheet will be issued by US EPA Region 5 when the project nears completion. This is project for the end of June 2011.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

EERS: 1 Response Manager, 2 Equipment Operators, 1 Cost Accountant

START: 1

USEPA: 1 OSC, Fields personnel on-site as necessary

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

IEPA Web Site: <http://www.epa.il.us/>

USEPA Web Site:

<http://www.epa.gov/region5/cleanup/markham/index.html>

6.2 Reporting Schedule

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V**

Subject: **POLREP #5**
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To: Jason El-Zein, ERB
 Linda Nachowicz, USEPA
 Rick Karl, USEPA

From: Steven Faryan, On-Scene Coordinator

Date: 6/9/2011

Reporting Period:

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category
Abandoned Open Dump

1.1.2 Site Description
See POLREP # 1-4

1.1.2.1 Location
See POLREP # 1-4

1.1.2.2 Description of Threat

See POLREP # 1-4

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1 -4

2. Current Activities**2.1 Operations Section****2.1.1 Narrative****2.1.2 Response Actions to Date**

U.S EPA and EERS contractor ER have staged, sampled and run HazCat analysis on 110 containers. The compatible waste groups, corrosive liquids, corrosive solids, acids, combustible liquids, base neutral liquids, base neutral solids have been composited in DOT approved containers. A Request for Proposal was sent out to disposal contractors and bids are due Friday June 10,2011.

The corrosive solid material has been staged on a liner and have been covered with plastic. The corrosive solids were sampled and results indicated no hazardous constituents. The corrosive solids and cut drums and containers will be transported via a dump truck and will be consolidated into the soil pile and disposed of at the landfill.

A request for proposal was awarded to Homewood Disposal for transportation and disposal of the estimated 1,500 tons of stabilized soil ,cut containers, PPE and other non-hazardous solids. The Newton County Landfill will be used for disposal. This landfill is in compliance with the CERCLA off-site disposal policy.

A treatability study was conducted on soil pile (#1, #2,#3, and #4) was conducted with fixation agents EnviroBlend, Free Flow and Inland Steel Lime Dust were used to treat the soil. The Free Flow 100 (phosphate) agent and Inland Steel bag house dust worked the best at stabilizing the metals. A cost analysis was conducted and the Free Flow 100 was chosen as the most cost effective since on only 3% blend was needed to fixate the soil and this will lower the volume of soil being transported and disposed of off site.

EERS contractor Environmental Restoration began stabilizing the soil piles on Monday June 6, 2011 utilizing the Free Flow 100. The Free Flow comes in 1 ton super sacs that has a shoot on the bottom to facilitate adding the material to the soil piles. A mix of 66 1 ton buckets to 2 one ton bags of Free Flow was used and the material was mixed thoroughly. Pile # 4 which is approximately 1,000 tons was completed on Tues June 7. Additional excavation was completed in the center of the 200 by 200 foot area where additional battery casings were observed. Additional excavation was completed in the area where a suspected paint waste was disposed of and the material is a greenish, yellow, and red color. This soil was stabilized with the Free Flow 100 material.

Heavy rains on Thursday June 9, 2011 have delayed the completion of the fixation of piles # 3 and # 2. Once these piles are mixed with the Free Flow 100, all of the piles will be sampled and TCLP analysis will be run on the soil. When the piles are determined to be non-hazardous, transportation and disposal will be initiated.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)was

See Enforcement Confidential Section in Action Memo

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Continue stabilization of soil piles. Award Contract to dispose of drums and containers. Prepare for disposal of stabilized soil using Homewood Disposal. Soil samples will be collected from stabilized soil to verify the material has been rendered non-hazardous and TCLP levels are below regulatory levels.

2.2.1.1 Planned Response Activities

Continue to stabilize the soil piles with a 3% blend of Free Flow 100. Sample piles to determine if the TCLP analysis is below regulatory levels. Award contract for disposal of the drums and containers. Consolidate non-hazardous solids and cut containers into the soil pile for disposal. The excavation area will be backfilled with clean fill from a City of Markham sewer project that was completed 2 blocks from the site. The material will be transported to the site and used as a cover on the excavation area. The removal of the lead and chromium contaminated soil will be conducted to depth allowed by the intrusion of perched ground water. At that level the excavation will have to be stopped due to ground water and surface water filling the excavation area. It is projected that the 900 ppm Industrial standard for lead will not be achieved in the excavation area. Snow fence or another type of marking material will be put down to delineate the excavation depth and clean fill will be graded over the excavation area. The City of Markham will be required to place a deed restriction detailing the area where the contaminated soil was not able to be removed. Any future development of this area will have to be planned to not disturb this soil unless it is removed and disposed of at a approved landfill. US EPA will meet with IEPA and the City of Markham to brief them on the excavation area.

2.2.1.2 Next Steps

Award sub-contracts for disposal of all hazardous materials, treated waste, solids, cut containers and miscellaneous bottles, aerosol cans and other items.

Dispose of stock piled soil, cut containers, PPE, and inorganic salts at a Subtitle D Landfill (Newton County Landfill in Indiana) which is in CERCLA off-site disposal policy.

Dispose of Drums and containers containing acid liquids, dye, cleaning agents, oil and combustible liquids and caustic liquids.

Backfill excavation with clean fill. The City of Markham has allowed USEPA to use the clean fill stockpiled on 159th and Western. Samples of the fill were collected and the pile was surveyed to determine volume. The fill was determined to be clean and will be used for the backfilling of the excavation area.

2.2.2 Issues

High Water table in the excavation area caused a shut down in removal activities. US EPA will not be able to remove all of the contaminated soil and the excavation can only be conducted down to the level where the perched water begins filling the area. A marker such as snow fence will be used to delineate the material left in place and clean fill will be graded over the area to prevent direct contact. A deed restriction will have to be placed in the title by the City of Markham and any future development of the property will have to consider this in the planning and design.

2.3 Logistics Section

NA

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$366,000.00	\$115,169.00	\$250,831.00	68.53%
TAT/START	\$30,000.00	\$21,200.00	\$8,800.00	29.33%
Intramural Costs				
USEPA - Direct	\$20,000.00	\$9,775.00	\$10,225.00	51.13%
Total Site Costs	\$416,000.00	\$146,144.00	\$269,856.00	64.87%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Safety Officer

Site HASP is on-site and daily safety plan meetings are being conducted. HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust has been detected above action levels with personal data ram. Air Sample pumps have been deployed to monitor dust and lead in the work zone. Lead blood samples will be collected from personnel at job end.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

A web site has been established on the US EPA Region 5 web site to keep the public and press informed on the progress of the removal action

2.7.2 Community Involvement Coordinator

A press briefing and fact sheet will be issued by US EPA Region 5 when the project nears completion. This is project for the end of June 2011.

3. Participating Entities**3.1 Unified Command****3.2 Cooperating and Assisting Agencies**

IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

EERS: 1 Response Manager, 2 Equipment Operators, 1 Cost Accountant

START: 1

USEPA: 1 OSC, Fields personnel on-site as necessary

5. Definition of Terms**6. Additional sources of information****6.1 Internet location of additional information/reports**

IEPA Web Site: <http://www.epa.il.us/>

USEPA Web Site:

<http://www.epa.gov/region5/cleanup/markham/index.html>

6.2 Reporting Schedule**7. Situational Reference Materials**

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region V**

Subject: **POLREP #6**
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To: Jason El-Zein, ERB
 Linda Nachowicz, USEPA
 Rick Karl, USEPA

From: Steven Faryan, On-Scene Coordinator

Date: 6/17/2011

Reporting Period: 6/01/11 to 6/17/11

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category
 Abandoned Open Dump

1.1.2 Site Description
 See POLREP # 1-5

1.1.2.1 Location
 See POLREP # 1-5

1.1.2.2 Description of Threat

See POLREP # 1-5

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1 -5

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

U.S EPA and EERS contractor ER have staged, sampled and run HazCat analysis on 110 containers. The compatible waste groups, corrosive liquids, corrosive solids, acids, combustible liquids, base neutral liquids, base neutral solids have been composited in DOT approved containers. The disposal was awarded to Phillips Services who will broker the waste to different facilities for disposal. Profiles were prepared and submitted for approval. Once the disposal facilities are identified then CERCLA off-site compliance checks will be completed.

The non hazardous soils, cut drums and soil that was scraped up around the drums were transported to the soil load out pile for consolidation. A roll off box truck and driver were utilized to transport the material to the soil pile and the material was consolidated and will be disposed of with the soil at Newton County Landfill.

The excavated soil that contained lead and chromium above the regulatory levels was stabilized with the Free Flow 100 material at a 3% blend and was mixed with the tracked excavator. Samples were collected on June 10 and sent to Micro Bac for analysis. Results were received on June 14 and all of the soil piles 2, 3 and 4 were under regulatory levels rendering the material as Special Waste. Transportation and Disposal was thus scheduled with Homewood Disposal who will transport and dispose of the material at Newton County Landfill.

The loading, transport and disposal of the treated soil will continue until all of the soil is disposed. This is projected to be June 24, 2011. The excavated grids will not be able to be excavated to the industrial clean up standard of 800 ppm because a perched ground water table has been encountered.

IEPA was on site on Wednesday, June 15, 2011. US EPA presented the option of covering the excavation area with snow fence and clean fill to prevent a direct contact threat. IEPA representatives Chuck Grigalowski and Chris Holy were on site. IEPA has a current order with the City of Markham to provide security at the site and prevent any further dumping. IEPA will utilize this order to require the City of Markham to place the proper deed restriction in the title for the lead and chromium excavation area.

The option to remove the direct contact threat in the lead and chromium excavation area will be to lay down a marker such as snow fence. Clean soil will be transported from 159 the street soil pile and placed over the excavation area and snow fence to provide a barrier to prevent any direct contact threat. The City of Markham will place a deed restriction on the excavation area to minimize disturbance and prevent excavation of the material unless it is disposed of.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) was

See Enforcement Confidential Section in Action Memo

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Special Waste, Stabilized Soil, Cut Drums, inorganic salts	soil	396 tons	1-18	On Site Free 3% Free Flow 100	Republic Services, Newton County Landfill, Brook, Indiana

2.2 Planning Section

2.2.1 Anticipated Activities

Continue disposal of all of the stabilized soil piles, cut drums, inorganic salts and debris. Schedule disposal of the drums and containerized waste with Phillips Services. Profiles have been prepared and are awaiting approval. The waste will be disposed of a several different facilities and CERCLA off-site compliance checks will be made once the facilities are identified. Purchase marker/barrier product and place in excavation area and cover with clean back fill.

2.2.1.1 Planned Response Activities

Dispose of all of the drums and containers at a CERCLA compliant off-site facility. The excavation area will be backfilled with clean fill from a City of Markham sewer project that was completed 2 blocks from the site. The material will be transported to the site and used as a cover on the excavation area. The removal of the lead and chromium contaminated soil will be conducted to depth allowed by the intrusion of perched ground water. At that level the excavation will have to be stopped due to ground water and surface water filling the excavation area. It is projected that the 800 ppm Industrial standard for lead will not be achieved in the excavation area. Snow fence or another type of marking material will be put down to delineate the excavation depth and clean fill will be graded over the excavation area. The City of Markham will be required to place a deed restriction detailing the area where the contaminated soil was not able to be removed. Any future development of this area will have to be planned to not disturb this soil unless it is removed and disposed of at a approved landfill.

2.2.1.2 Next Steps

Award sub-contracts for disposal of all hazardous materials, treated waste, solids, cut containers and miscellaneous bottles, aerosol cans and other items.

Dispose of stock piled soil, cut containers, PPE, and inorganic salts at a Subtitle D Landfill (Newton County Landfill in Indiana) which is in CERCLA off-site disposal policy.

Phillips Services has been contracted to dispose of drums, containers and overpacks containing acid liquids, caustic liquids, oxidizers, dye, cleaning agents, oil and

combustible liquids.

Grade, place marker barrier (snow fence for fabric) and backfill excavation with clean fill to prevent the direct contact threat. The City of Markham will allow use of the clean fill stockpiled on 159th and Western. Samples of the fill were collected and the pile was surveyed to determine volume. The fill was determined to be clean and will be used for the backfilling of the excavation area.

2.2.2 Issues

High Water table in the excavation area has prevented the removal of all of the lead and chromium contaminated soil to levels below the Industrial Standards. A marker fabric such as snow fence will be used to delineate the material left in place and clean fill will be graded over the area to prevent any direct contact threat. A deed restriction will have to be placed in the title by the City of Markham and any future development of the property will have to consider this in the planning and design. IEPA has a current order with the City of Markham for security at the site and this will be utilized to have the City place a deed restriction on the Title for the excavation area where some contamination will remain due to the high water table.

2.3 Logistics Section

NA

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$366,000.00	\$135,233.00	\$230,767.00	63.05%
TAT/START	\$30,000.00	\$24,200.00	\$5,800.00	19.33%
Intramural Costs				
USEPA - Direct	\$20,000.00	\$12,775.00	\$7,225.00	36.13%
Total Site Costs	\$416,000.00	\$172,208.00	\$243,792.00	58.60%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Safety Officer

Site HASP is on-site and daily safety plan meetings are being conducted. HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust has been detected above action levels with personal data ram. Air Sample pumps have been deployed to monitor dust and lead and chromium in the work zone. Lead and chromium results were received on air samples and results were below threshold limit values for lead and chromium. Lead blood

samples will be collected from personnel at job end.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

A web site has been established on the US EPA Region 5 web site to keep the public and press informed on the progress of the removal action

2.7.2 Community Involvement Coordinator

A press event has been scheduled for the morning of June 23, 2011. IEPA, USEPA, the City of Markham and Illinois Attorney Generals office and Jesse Jackson Jr. congressional office have been notified of the event and invited to participate.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

EERS: 1 Response Manager, 2 Equipment Operators, 1 Cost Accountant

START: 1

USEPA: 1 OSC, Fields personnel on-site as necessary

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

IEPA Web Site: <http://www.epa.il.us/>

USEPA Web Site:

<http://www.epa.gov/region5/cleanup/markham/index.html>

6.2 Reporting Schedule

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Markham Dump - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V**

Subject: **POLREP #7**
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To: Jason El-Zein, ERB
 Linda Nachowicz, USEPA
 Rick Karl, USEPA

From: Steven Faryan, On-Scene Coordinator

Date: 6/23/2011

Reporting Period:

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:		Completion Date:	
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category
Abandoned Open Dump

1.1.2 Site Description

See POLREP # 1-6

1.1.2.1 Location

See POLREP # 1-6

1.1.2.2 Description of Threat

See POLREP # 1-6

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1 -6

2. Current Activities**2.1 Operations Section****2.1.1 Narrative****2.1.2 Response Actions to Date**

U.S EPA and EERS contractor ER have staged, sampled and run HazCat analysis on 110 containers. The compatible waste groups, corrosive liquids, corrosive solids, acids, combustible liquids, base neutral liquids, base neutral solids have been composited in DOT approved containers. The disposal was awarded to Phillips Services who will broker the waste to different facilities for disposal. Profiles were prepared and submitted for approval. The Drums and containers will be shipped the week ending July 1, 2011.

The loading, transport and disposal of the treated soil which initiated on June 13, 2011 has been completed on June 23, 2011. A total of 2300 tons of stabilized soil was transported and disposed of at Republic Services Newton County Landfill in Brook Indiana.

Samples will be collected from the excavation area and screening for lead and chromium will be conducted with Innovex XRF unit. Some of the excavated grids will not be able to be excavated to the industrial clean up standard of 800 ppm because a perched ground water table has been encountered. A marker will be placed on the areas where the clean up objective was not achieved and the area will be covered with clean fill. The clean fill will be transported in from a soil pile 2 blocks away on 159th street that the City of Markham has allowed USEPA to use. The placement of the marker and the backfilling of the excavation area will initiated on June 24, 2011

A press event was held on June 23, 2011 to provide a site update and prepare for close out of the USEPA action and transition of the site back to the City of Markham. The City of Markham will continue to provide security and prevent dumping at the site and follow other provisions of the order they have agreed to with the Illinois Attorney General's office.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)was

See Enforcement Confidential Section in Action Memo

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Special Waste, Stabilized Soil, Cut Drums, inorganic salts	soil	2016 tons	as if June 21, 2011	On Site Free 3% Free Flow 100	Republic Services, Newton County Landfill, Brook, Indiana

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2.2 Planning Section

2.2.1 Anticipated Activities

Continue disposal of all of the stabilized soil piles, cut drums, inorganic salts and debris. Schedule disposal of the drums and containerized waste with Phillips Services. Profiles have been prepared and are awaiting approval. The waste will be disposed of a several different facilities and CERCLA off-site compliance checks will be made once the facilities are identified. Purchase marker/barrier product and place in excavation area and cover with clean back fill.

Complete back fill and grading during the week ending July 1, 2011.

Demobilize all equipment, trailers and personnel (planned July 1, 2011)

2.2.1.1 Planned Response Activities

Dispose of all of the drums and containers at a CERCLA compliant off-site facility. The excavation area will be backfilled with clean fill from a City of Markham sewer project that was completed 2 blocks from the site. The material will be transported to the site and used as a cover on the excavation area. The removal of the lead and chromium contaminated soil will be conducted to depth allowed by the intrusion of perched ground water. At that level the excavation will have to be stopped due to ground water and surface water filling the excavation area. It is projected that the 800 ppm Industrial standard for lead will not be achieved in the some of the grids in the excavation area. Snow fence or another type of marking material will be placed on those grids where levels of lead and chromium are above the industrial standards.

The City of Markham will be required to place a deed restriction detailing the area where the contaminated soil was not able to be removed. Any future development of this area will have to be planned to not disturb this soil unless it is removed and disposed of at a approved landfill. The City of Markham is planning to conduct a Phase II environmental assessment of the property to determine if any other contamination exists in the soil or ground water.

2.2.1.2 Next Steps

Obtain profile approval and schedule disposal of all hazardous materials, treated waste, solids, cut containers and miscellaneous bottles, aerosol cans and other items. Phillips Services has been contracted to dispose of drums, containers and overpacks containing acid liquids, caustic liquids, oxidizers, dye, cleaning agents, oil and combustible liquids.

Grade, place marker barrier (snow fence) and backfill excavation with clean fill to prevent the direct contact threat. The City of Markham will allow use of the clean fill stockpiled on 159th and Western. Samples of the fill were collected and the pile was surveyed to determine volume. The fill was determined to be clean and will be used for the backfilling of the excavation area.

2.2.2 Issues

High Water table in the excavation area has prevented the removal of all of the lead and chromium contaminated soil to levels below the Industrial Standards. A marker fabric such as snow fence will be used to delineate the material left in place and clean fill will be graded over the area to prevent any direct contact threat. A deed restriction will have to be placed in the title by the City of Markham and any future development of the property will have to consider this in the planning and design. IEPA has a current order with the City of Markham for security at the site and this will be utilized to have the City place a deed restriction on the Title for the excavation area where some contamination will remain due to the high water table.

2.3 Logistics Section

NA

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$366,000.00	\$158,063.00	\$207,937.00	56.81%
TAT/START	\$30,000.00	\$26,200.00	\$3,800.00	12.67%
Intramural Costs				
USEPA - Direct	\$20,000.00	\$15,275.00	\$4,725.00	23.63%
Total Site Costs	\$416,000.00	\$199,538.00	\$216,462.00	52.03%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Safety Officer

Site HASP is on-site and daily safety plan meetings are being conducted. HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust has been detected above action levels with personal data ram. Air Sample pumps have been deployed to monitor dust and lead and chromium in the work zone. Lead and chromium results were received on air samples and results were below threshold limit values for lead and chromium. Lead blood samples will be collected from personnel at job end.

2.6 Liaison Officer

NA

2.7 Information Officer

2.7.1 Public Information Officer

A web site has been established on the US EPA Region 5 web site to keep the public and press informed on the progress of the removal action

2.7.2 Community Involvement Coordinator

A press event was held on June 23, 2011. IEPA, USEPA, the City of Markham and Illinois Attorney General's office and Jesse Jackson Jr. congressional office were notified of the event and invited to participate. The Chicago Tribune was on site and will run an article on the clean up. IEPA attended the press brief along with the City of Markham and one of the Markham alderman.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

EERS: 1 Response Manager, 2 Equipment Operators, 1 Cost Accountant

START: 1 on site as necessary

USEPA: 1 OSC, Fields personnel on-site as necessary

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

IEPA Web Site: <http://www.epa.il.us/>

USEPA Web Site:

<http://www.epa.gov/region5/cleanup/markham/index.html>

6.2 Reporting Schedule

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Markham Dump - Removal Polrep
 Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region V

Subject: POLREP #8
 Final
 Markham Dump
 B5WK
 Markham, IL
 Latitude: 41.5979794 Longitude: -87.6728209

To: Jason El-Zein, ERB
 Douglas Ballotti, USEPA
 Rick Karl, USEPA
 Charles Gebien, USEPA

From: Steven Faryan, On-Scene Coordinator

Date: 12/2/2011

Reporting Period: 6/23/2011 through 07/01/2011

1. Introduction

1.1 Background

Site Number:	B5WK	Contract Number:	EP-S5-09-05
D.O. Number:	0061	Action Memo Date:	3/11/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/11/2011	Start Date:	4/11/2011
Demob Date:	7/1/2011	Completion Date:	7/1/2011
CERCLIS ID:	ILN000510534	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category
 Abandoned Open Dump

1.1.2 Site Description
 See POLREP # 1-7

1.1.2.1 Location
 See POLREP # 1-7

1.1.2.2 Description of Threat
 See POLREP # 1-7

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1-7

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

U.S EPA and the ERRS contractor, Environmental Restoration (ER), have staged, sampled and run HazCat analysis on 110 containers. The compatible waste groups: corrosive liquids, corrosive solids, acids, combustible liquids, base neutral liquids, and base neutral solids were composited in DOT approved containers. The disposal was awarded to Phillips Services who brokeered the waste to different facilities for disposal. Profiles were prepared and submitted for approval. The drums and containers were shipped off Site to Petro-Chem Processing Group in Detroit, MI. In total, approximately 1,500 gallons of liquid hazardous materials and approximately 900 pounds of solid hazardous materials were shipped off site.

The loading, transport and disposal of the treated soil was initiated on June 13, 2011, and was completed on June 23, 2011. A total of 2,474.71 tons of stabilized soil was transported and disposed of at Republic Services Newton County Landfill in Brook Indiana.

Confirmation samples were collected from the excavation area to determine the remaining levels of lead in the soil prior to backfilling. Additionally, screening of the soil with an Innovx XRF unit was performed to determine metal levels in the soil. Some of the excavated grids were not able to be excavated to the industrial clean up standard of 800 ppm lead due to a perched groundwater table. An orange snow fence marker was put in place where the cleanup objective was not acheived and the area covered with clean fill. In total, 1,500 cubic yards of clean fill (provided by the City of Markham) were utilized in the excavation area. The excavation area was then seeded with grass and wild flower seed, also provided by the City of Markham.

All field personnel and equipment were decontaminated on Site and demobilized on July 1, 2011.

A press event was held on June 23, 2011, to provide a site update and prepare for close out of the U.S. EPA action and transition of the site back to the City of Markham. The City of Markham will continue to provide security and prevent dumping at the site and follow other provisions of the order they have agreed to with the Illinois Attorney General's office.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)was

See Enforcement Confidential Section in Action Memo

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Special Waste, Stabilized Soil, Cut Drums, inorganic salts	soil	2016 tons	NA	On-Site Free 3% Free Flow 100	Republic Services, Newton County Landfill, Brook, Indiana
Waste, Toxic, Liquid, Corrosive, Inorganic, Arsenic	liquid	200 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI

Waste, Corrosive Liquid, Hydrochloric Acid	liquid	150 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Waste, Oxidizing solid, PGII	solid	165 pounds	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Waste, Toxic, Liquids, Organic, Lead	liquid	100 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Non DOT, Non RCRA Regulated Liquids	liquid	50 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Non DOT, Non RCRA Regulated Liquids	liquid	300 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Non DOT, Non RCRA Regulated Liquids	liquid	300 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Waste, Oxidizing, Solid, PGII	solid	660 pounds	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Waste, Toxic , Liquids, Organic, Lead	liquid	50 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI
Non DOT, Non RCRA Regulated Liquids	liquid	50 gallons	008500312 JJK		Petro-Chem Processing Group, Detroit, MI

R5 Priorities Summary

This is an Integrated River Assessment. The numbers should overlap.	Miles of river systems cleaned and/or restored	na
	Cubic yards of contaminated sediments removed and/or capped	na
	Gallons of oil/water recovered	na
	Acres of soil/sediment cleaned up in floodplains and riverbanks	na
Stand Alone Assessment	Acres Protected	4
	Number of contaminated residential yards cleaned up	0

	Human Health Exposures Avoided	1,000
	Number of workers on site	6

2.2 Planning Section

2.2.1 Anticipated Activities

None

2.2.1.1 Planned Response Activities

None

2.2.1.2 Next Steps

Security measures such as security cameras and increased police activity have been put in place by the City of Markham. These are meant to prevent/deter future dumping on the property.

2.2.2 Issues

High Water table in the excavation area has prevented the removal of all of the lead and chromium contaminated soil to levels below the Industrial Standards. A marker fabric (snow fence) has been used to delineate the material left in place and clean fill has been graded over the area to prevent any direct contact threat. A deed restriction will have to be placed in the title by the City of Markham and any future development of the property will have to consider this in the planning and design.

IEPA has a current order with the City of Markham for security at the site and this will be utilized to have the City place a deed restriction on the Title for the excavation area where some contamination will remain due to the high water table.

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NA

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$366,000.00	\$205,122.00	\$160,878.00	43.96%
TAT/START	\$30,000.00	\$26,200.00	\$3,800.00	12.67%
Intramural Costs				
USEPA - Direct	\$20,000.00	\$17,400.00	\$2,600.00	13.00%
Total Site Costs	\$416,000.00	\$248,722.00	\$167,278.00	40.21%

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cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Site HASP is on-site and daily safety plan meetings were conducted. The Site-specific HASP was modified to allow Level D personnel protection in the lead excavation zone. No dust was detected above action levels with personal data ram. Air Sample pumps were deployed to monitor dust and lead and chromium in the work zone. Lead and chromium results were received on air samples and results were below threshold limit values for lead and chromium. Lead blood samples will be collected from personnel at job end.

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IEPA

Illinois Attorney General's Office

Village of Markham

4. Personnel On Site

ERRS: 1 Response Manager, 2 Equipment Operators, 1 Cost Accountant

START: 1 on site as necessary

USEPA: 1 OSC, Fields personnel on-site as necessary

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

IEPA Web Site: <http://www.epa.il.us/>

USEPA Web Site:

<http://www.epa.gov/region5/cleanup/markham/index.html>

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.